

FIG. 1

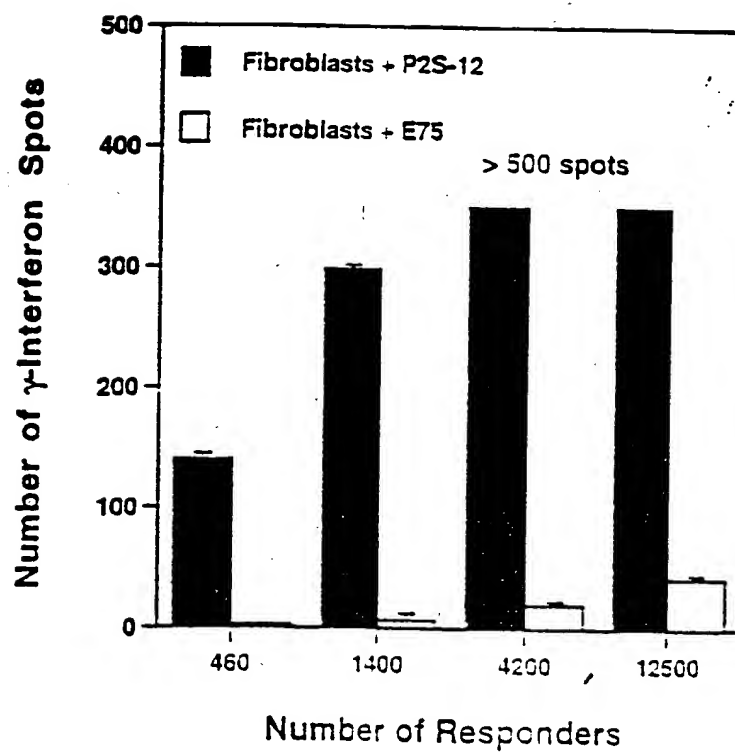


FIG. 2A

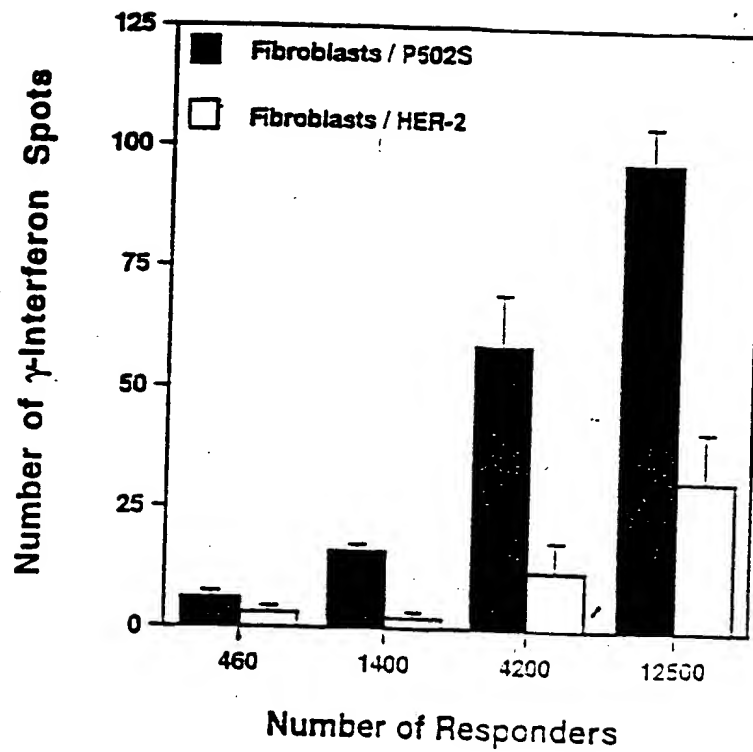
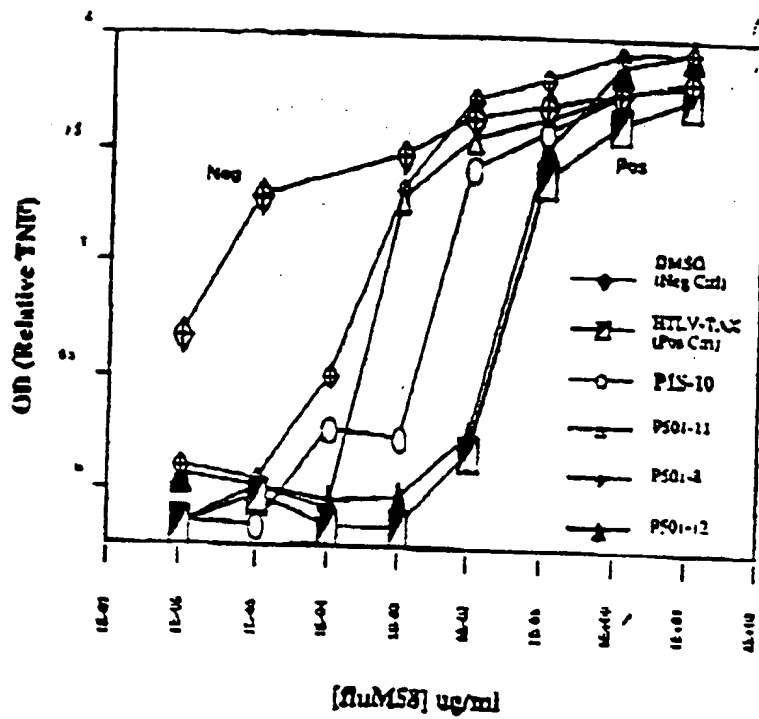


FIG. 2B



Figure

3

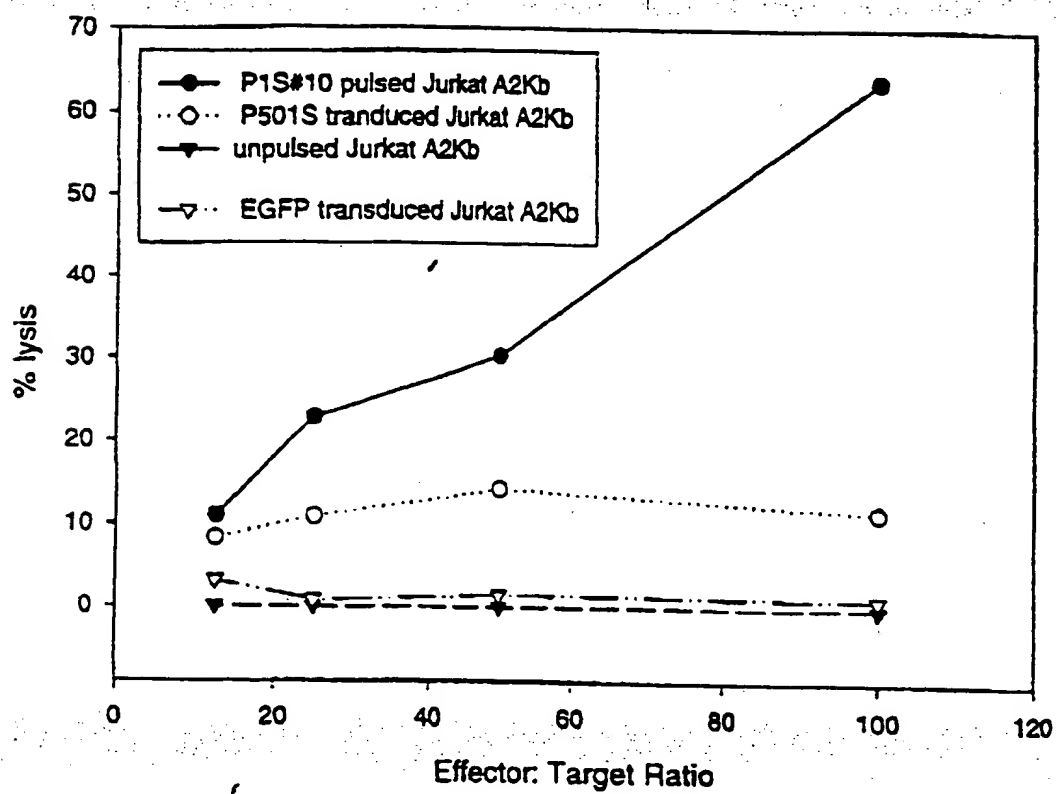


Figure 4

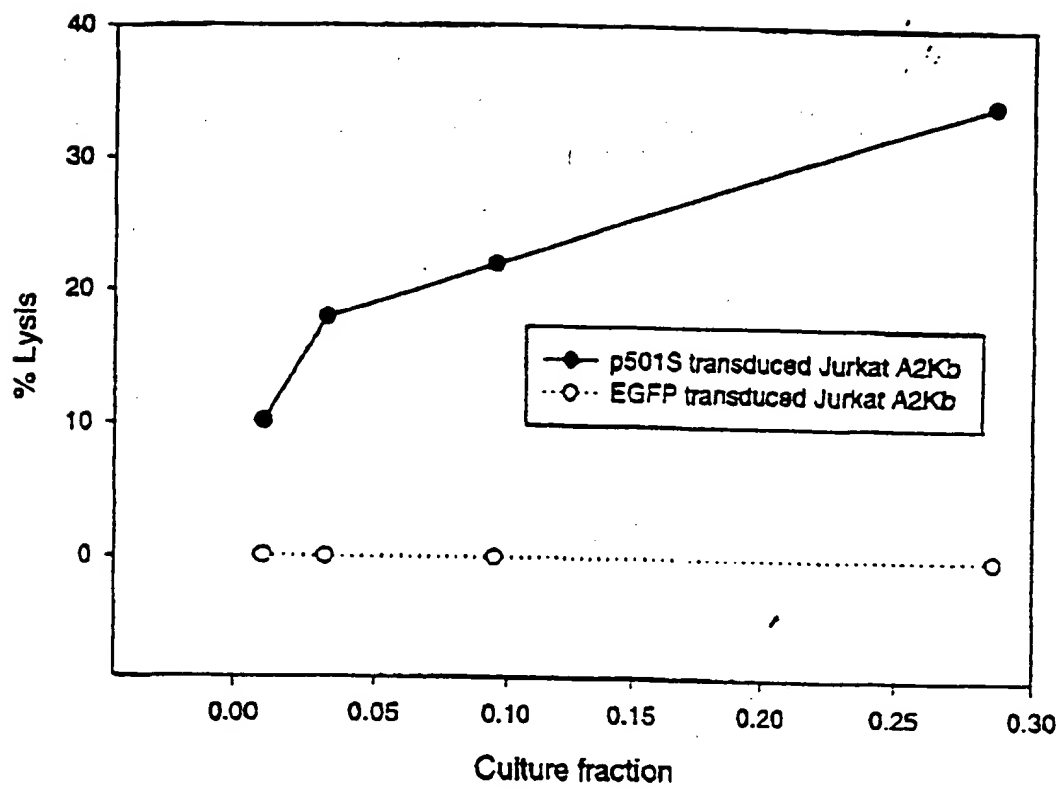


Figure 5

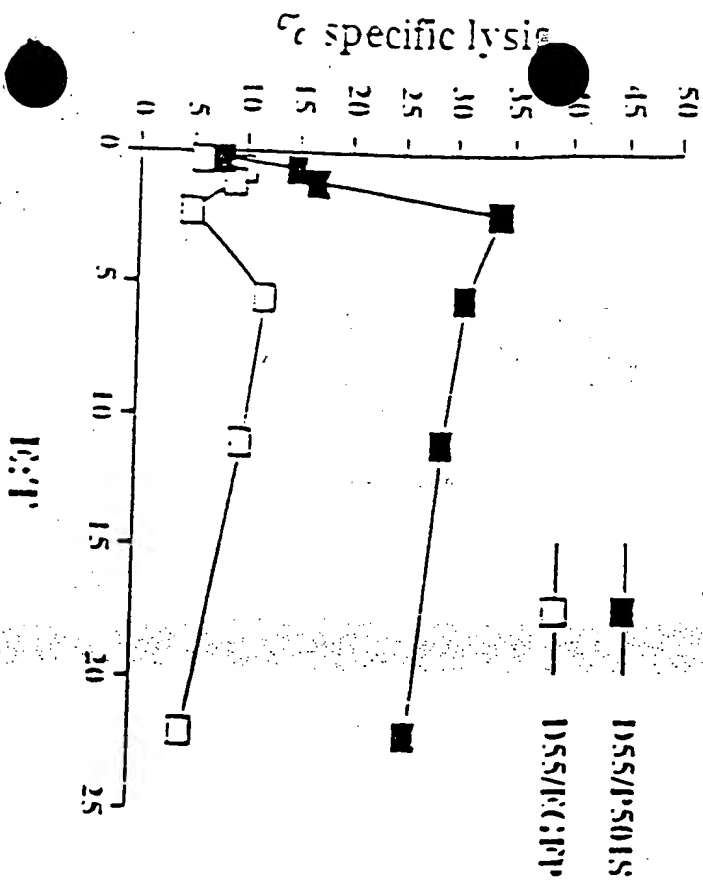


Fig. 6A

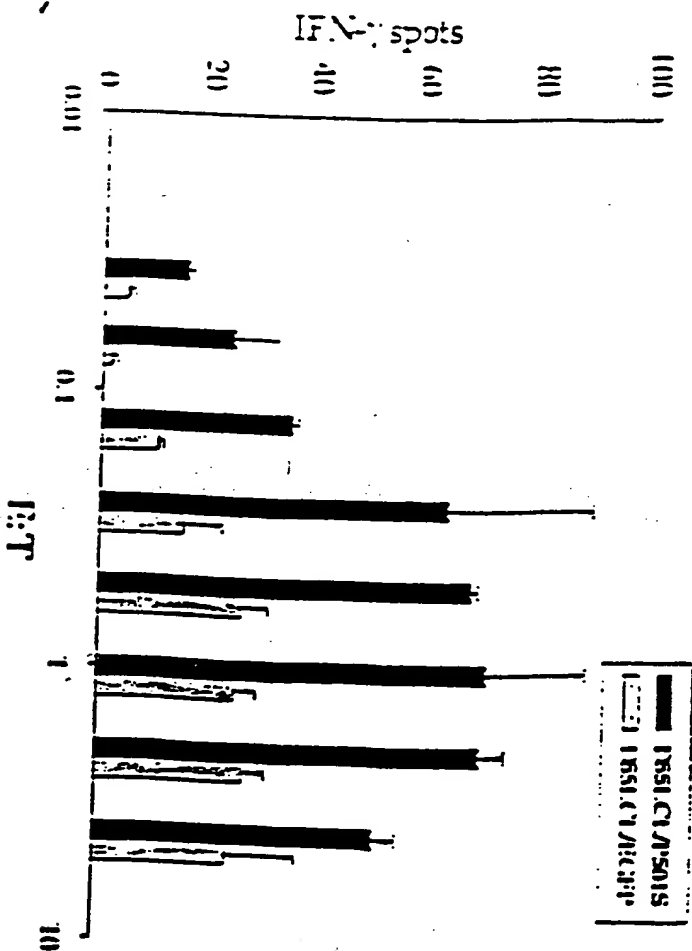
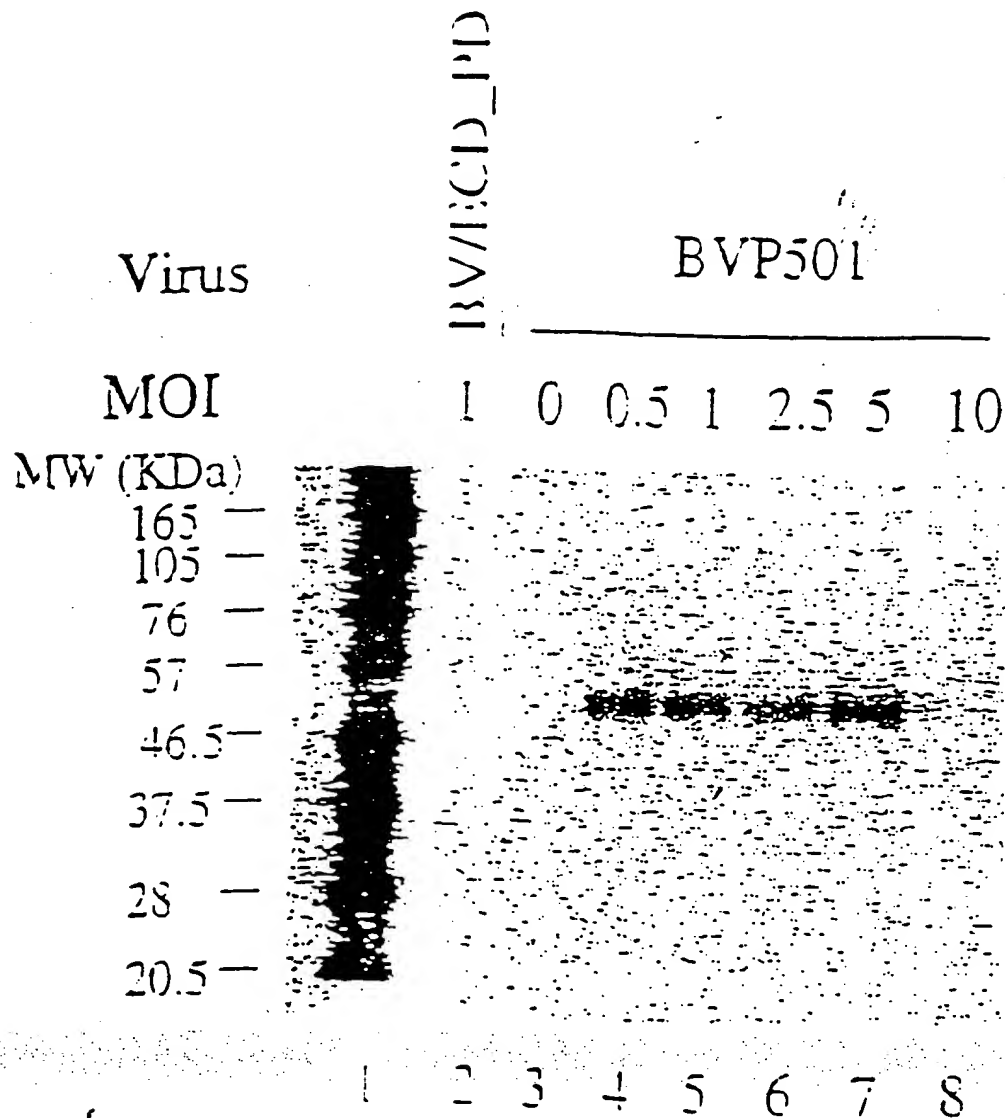


Fig. 6B

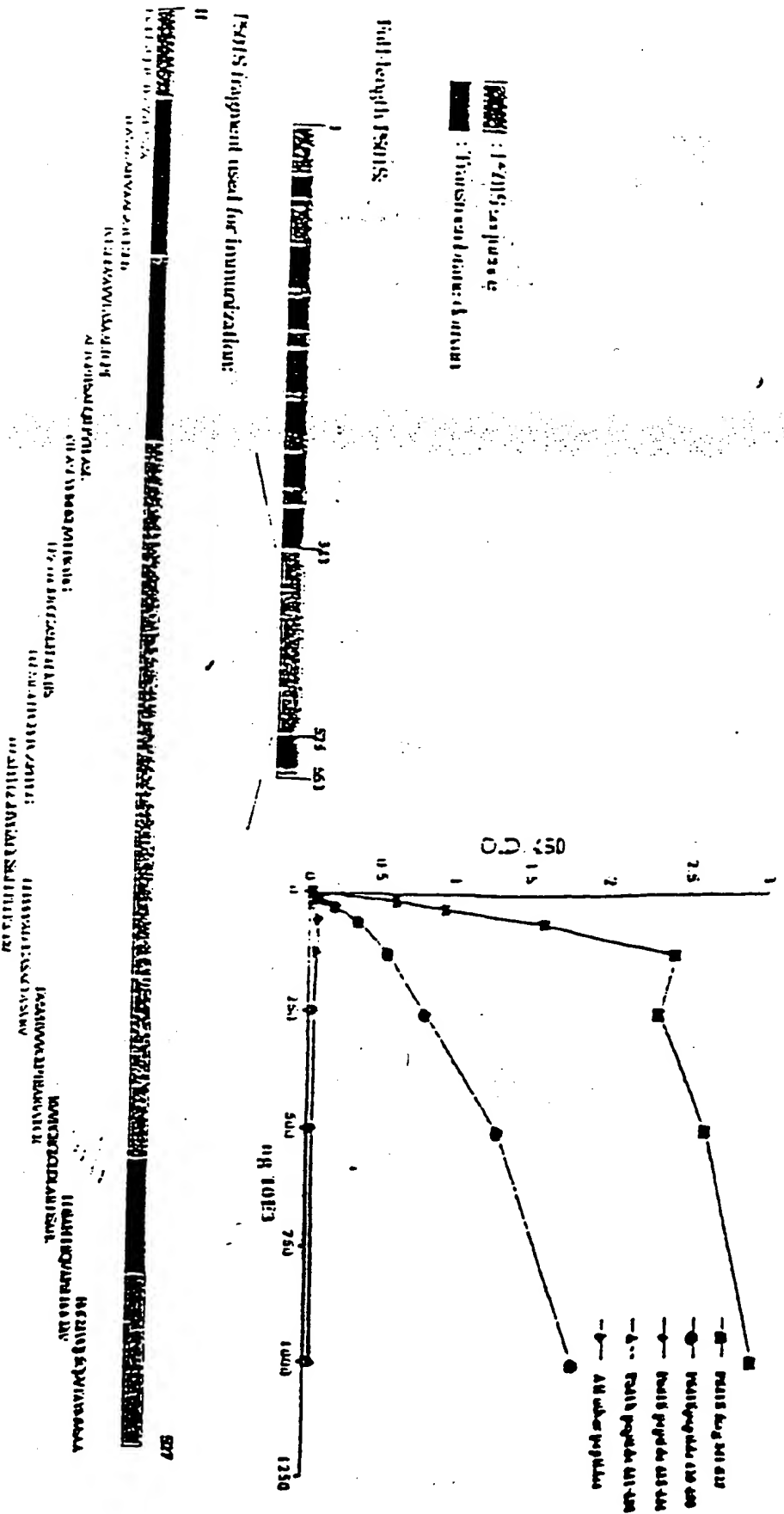
Expression of P501S by the Baculovirus Expression System



0.6 million high cells in 6-well plate were infected with an unrelated control virus BV/ICED_PD (lane 2) without virus (lane 3), or with recombinant baculovirus for P501 at different MOIs (lane 4 - 8). Cell lysates were run on SDS-PAGE under the reducing conditions and analysed by Western blot with a monoclonal antibody against P501S-ICED-GAD65. Lane 1 is the biotinylated protein molecular weight marker (BioLabs).

Fig. 7

Figure 8. Mapping of the epitope recognized by 10E3-G4-D3



7

Figure 1. Schematic of P501S with predicted transmembrane, cytoplasmic, and extracellular regions

MVQRAVSHLRIRK AQLLYNLLTGLEFVCLAAQHTVYPPILLRVGVVERKFM TNYLQIGPVLQILYCYPLLSAS
 DWWRGRYGRRRP EWALSLQILSLFLPRAGWL AGLCTDPDRPLE LAIILQVGLLDFCQGVCTPL
 FALSLDFRDPDHCRQ AYSYVAFEMISLGGCTGVLPAL DWVTSALAPVLCQQR
 CLPGLTTLFLTCVNAATLY AFEAACTPEPAKGLSAPSSPHCTPARRAFRNIGAILPRI
 HOLCTAMPRTLR LPVAFLCYWMALMTFLTYTP VGRGLYQGVPRAPPTEARRIYDEGYR
 MGLGLFLQCAISLYSLYM DRIVQREFCTRAVYAS VAAFPYAACIATCLSHSVAVYTA SAA
 LTGETTSALQILTYTLASLY HREKQVFLPKYRGDTGASSEDSIMTSELPGPKPGAPFPNCHIVGAGGSL
 LPPPPALCGASACDVSVRVVCEPTEARVVPVGRG ICLDLAHLPSAFLSQVAPSLF MGSIVQLSQS
 VTAYMVSAAGLILYALYFAT QVVFDSDLAKYSA

Underlined sequence: Predicted transmembrane domain; Bold sequence: Predicted extracellular domain;
 Italic sequence: Predicted intracellular domain. Sequence in bold/underlined: used to generate polyclonal rabbit serum

Localization of domains predicted using IMMTOPI (G.E. Tusnady and I. Simon (1998) Principles
 Governing Amino Acid Composition of Integral Membrane Proteins: Applications to topology Prediction. J.Mol Biol. 283,
 489-506.

Genomic Map of (5) Corlxa Candidate Genes

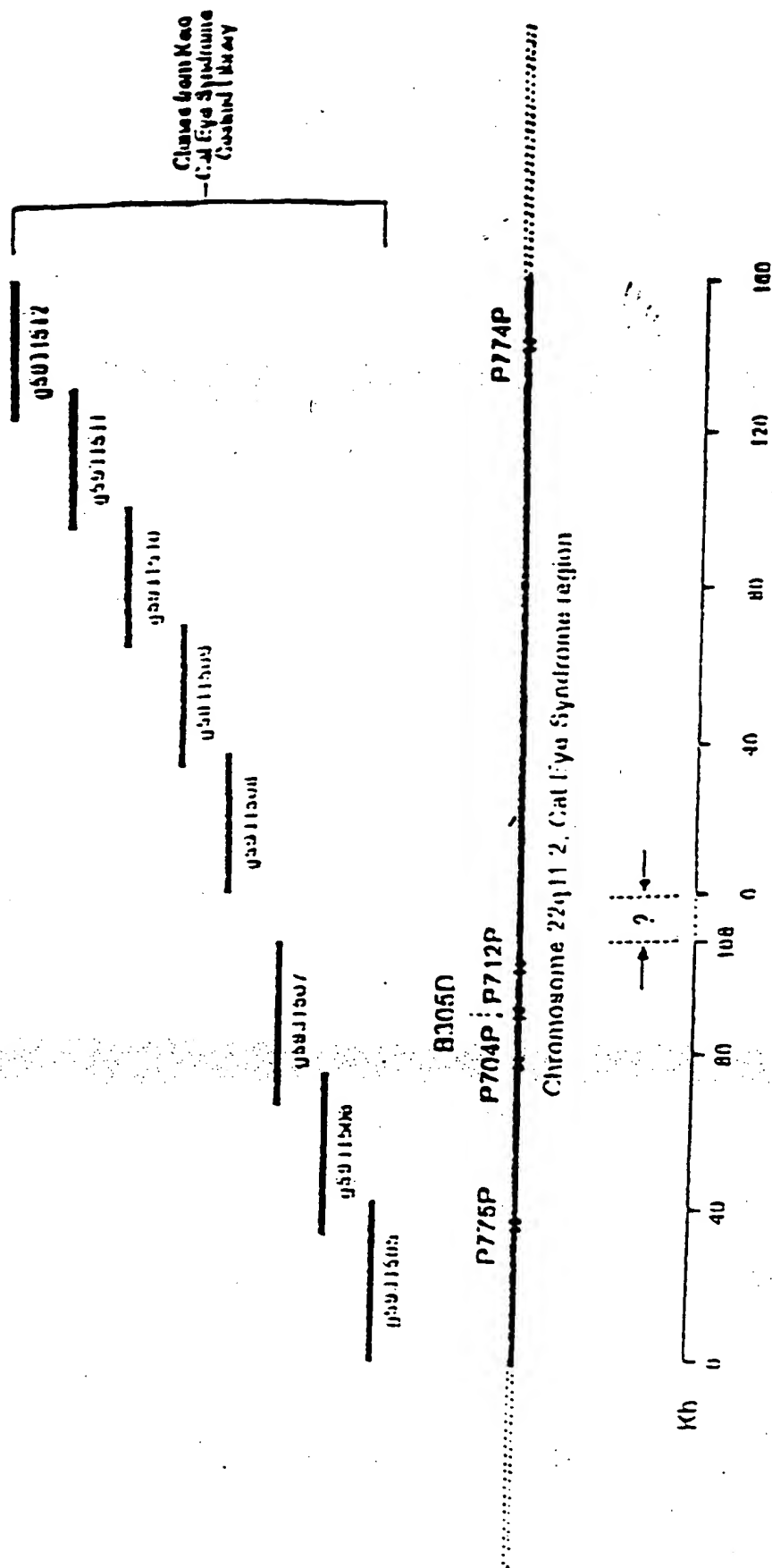


Fig. 10

FIGURE 4. Elisa assay of rabbit polyclonal antibody specificity

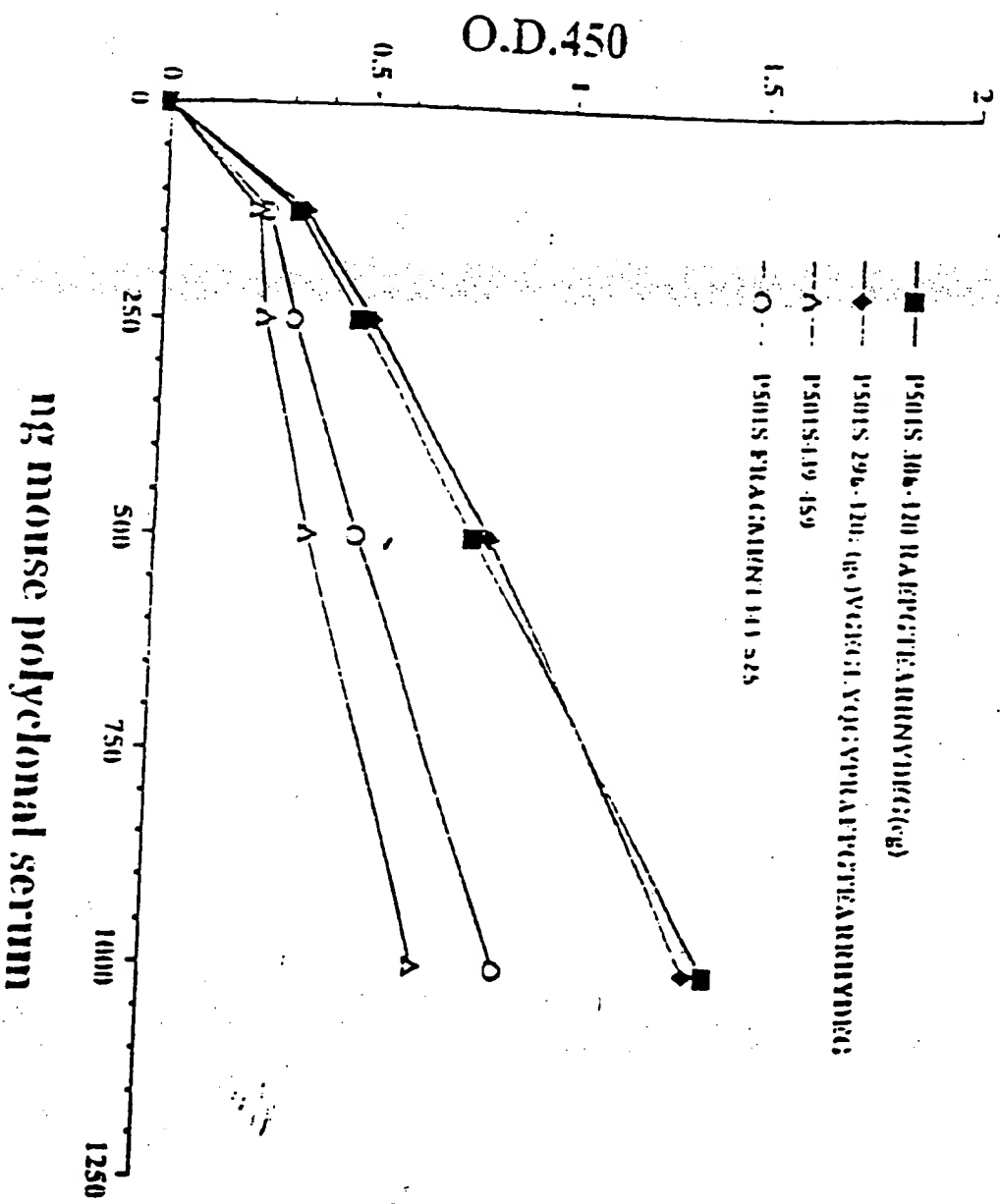


Fig. 11

09592793-051300

10 20 30 40 50 60 70

GTCACCTAGGAAAAGGTGTCTTTTCGGGCAGCCGGGCTCAGCATGAGGAACAGAAGGAATGACACTCTGG 70
ACAGCACCCGGACCCTGTACTCCAGCGCGTCTCGGAGCACAGACTTGTCTTACACTGAAAGCGACTTGGT 140
GAATTTTATTCAAGCAAATTTTAAGAAACGAGAATGTGTCTTCTTTACCAAAGATTCCAAGGCCACGGAG 210
AATGTGTGCAAGTGTGGCTATGCCAGAGCCAGCAGATGGAAGGCACCCAGATCAACCAAAGTGAGAAAT 280
GGAAGTACAAGAAACACACCAAGGAATTTCTACCGACGCCTTTGGGGATATTCAGTTTGAGACACTGGG 350

360 370 380 390 400 410 420

GAAGAAAGGGAAGTATATACGTCTGTCTTGCAGACAGGACGCGGAAATCCTTTACGAGCTGCTGACCCAG 420
CACTGGCAGCTGAAAACAACCAACCTGGTCATTTCTGTGACCGGGGGCGCCAAGAAGTTGCGCCTGAAGC 490
CGCGCATGCGCAAGATCTTCAGCCGGCTCATCTACATCGCGCAGTCCAAAGGTGCTTGGATTCTCACGGG 560
AGGCACCCATTATGGCCTGACGAAAGTACATCGGGGAGGTGGTGAGAGATAACACCATCAGCAGGAGTTCA 630
GAGGAGAAATATTGTGGCCATTGGCATAAGAGCTTGGGGCATGGTCTCCAACCGGGACACCCCTCATCAGGA 700

710 720 730 740 750 760 770

ATTGCGATGCTGAGGGCTATTTTTTAGCCCAAGTACCTTAAGATGACTTCACAAGGGATCCACTGTATAT 770
CCTGGACAACAACACACACATTTGGCTGCTCGTGGACAAAGGCTGTATGGACATCCCACTGTGCAAGCA 840
AAGCTCCGGAAATCAGCTAGAGAAAGCATATCTGTGAGCGCACTATTCAAGATTCCAACTATGGTGGCAAGA 910
TCCCCATTGTGTGTTTGGCCCAAGGAGGTGGAAAAGAGACTTTGAAAGCCATCAATACCTCCATCAAAAA 980
TAAATTTCTTGTGTGGTGGTGGAAAGGCTCGGGCGGATCGGTGATGTGATCGCTAGCCTGGTGGAGGTG 1050

1060 1070 1080 1090 1100 1110 1120

GAGGATGCCCGGACATCTTTTGGCGTCAAGGAGAAGGTGGTGGGCTTTTTACCCCGGACGGTGTCCGGG 1120
TGTCTGAGGAGGAGACTGAGAGTTGGATCAAAATGGCTCAAGAAATTTCTGAAATGTTCTCACCTATTAA 1190
AGTTATTAAATGGAAGAAGCTGGGGATGAAATTTGTAGCAATGGCATCTCTACGGCTCTATACAAAGCC 1260
TTCAGCACCAAGTGAGCAAGACAAAGGATAACTGGAAATGGGCAGTGAAGCTTCTGTGGAGTGGAAACAG 1330
TGGACTTAGCCAAATGATGAGATTTTCACCAATGACCGCGGATGGGAGTCTGCTGACCTTCAAGAAATCAT 1400

1410 1420 1430 1440 1450 1460 1470

GTTTACGGCTCTCATAAAGGACAGACCCAAGTTTGTGGGCTCTTTCTGGAGAATGGCTTGAACCTACGG 1470
AAGTTTCTCACCCATGATGTCTCACTGAAGCTCTCTCCAACCACTTCAGCACGCTTGTGTACCGGAATC 1540
TGCAGATCGCCAAGAATTTCTATAATGATGCCCTCTTCACGTTTGTCTGGAAACTGGTTGCGAATTTCCG 1610
AAGAGGCTTCCGGAAAGGAAGACAGAAATGGCGGGGATGAGATGGACATAGAATCCACGACGTGTCTCT 1680
ATTACTCGGCACCCCTGCAAGCTCTCTTCATCTGGGCCATTTCTTCAGAAAGGAAGGAATCTTCCAAG 1750

1760 1770 1780 1790 1800 1810 1820

TCATTTGGGAGCAGACACGGGGCTGCACTCTGGCAGCCCTGCGAGCCAGCAAGCTTCTGAAGACTCTGGC 1820
CAAAATGAAGAAACACATCAATGCTGTGTGGGAGTTCGAGGAGCTGGCTAATGAGTACGAGACCCGGCT 1890
GTTGAGCTGTCACTGAGTGTACAGCAGCGATGAAGACTTGGCAGAACAGCTGCTGGTCTATTCTGTG 1960
AAGCTTGGGGTGGAAAGCAACTGTCTGGAGCTGGGGTGGAGGCTACAGACCAAGCATTCACCGGCCAGCC 2030
TGGGGTCCAGAAATTTCTTTCTAAGCAATGGATGGAGAGATTTCCCGAGACACCAAGAAGCTGGAAAGAT 2100

Fig. 12A (i)

002490-0626560

2110	2120	2130	2140	2150	2160	2170
TCCTGTGTCTGTTTATTATACCCCTTGGTGGGCTGTGGCTTTGTATCATTTAGGAAGAAACCTGTGACA	2170					
AGCACAAGAAGCTGCTTTGGTACTATGTGGGCTTCTTCACCTCCCCCTTCGTGGTCTTCTCCTGGAATGT	2240					
GGTCTTCTACATCGCCTTCTCCTGCTGTTTGCCTACGTGCTGCTCATGGATTTCATTTCGGTGCCACAC	2310					
CCCCCGAGCTGCTCCTGTAATCCCTGGTCTTTGTCTCTTCTGTGATGAAGTCAGACAGTGGTACGTAA	2380					
ATGGGGTGAATTATTTTACTGACCTGTGGAATGTGATGGACACGCTGGGGCTTTTTTACTTCATAGCAGG	2450					
2460	2470	2480	2490	2500	2510	2520
AATTGTATTTTGGGCTCCACTCTTCTAATAAAAGCTCTTTGTATTCTGGACGAGTCATTTTCTGTCTGGAC	2520					
TACATTATTTTCACTCTAAGATTGATCCACATTTTACTGTAAGCAGAAACCTAGGACCCCAAGATTATAA	2590					
TGCTGCAGAGGAIGCTGATCGATGTGTCTTCTTCTCTCTCTTTGC3GTGTGGATGGTGGCCTTTGG	2660					
CGTGGCCAGGCAAGGGATCCTTAGGCAGAAATGAGCAGCGCTGGAGGTGGATATTCGTTTCGGTCATCTAC	2730					
GAGCCCTACCTGGCCATGTTCCGCCAGGTGCCCAGTGACGTGGATGGTACCACGTATGACCTTGCCCACT	2800					
2810	2820	2830	2840	2850	2860	2870
GCACCTTCACTGGGAATGAGTCCAAGCCACTGTGTGTGGAGCTGGATGAGCACAACCTGCCCGGTTCCC	2870					
CGAGTGGATCACCATCCCCCTGGTGTGCATCTACATGTTATCCACCAACATCCTGCTGGTCAACCTGCTG	2940					
GTCGCCATGTTTGGCTACACGGTGGGCACCGTCCAGGAGAAACAATGACCAGGTCTGGAAGTTCAGAGGT	3010					
ACTTCTCTGGTGCAGGAGTACTGCAGCGCGCTCAATAATCCCTTCCCTTCATGCTCTTGGCTTACTTCTA	3080					
CATGGTGTGAAGAAGTGCCTCAAGTGTGGTGCAGGAGAAACATGGAGTCTTCTGTCTGTGCTTTTC	3150					
3160	3170	3180	3190	3200	3210	3220
AAAAATGAAGACAATGAGACTCTGGCATGGGAGGGTGTGATGAAGGAAAACCTACCTTGTCAAGATCAACA	3220					
CAAAAGCCACGACACCTCAGAGGAAATGAGGCATCGATTTAGACAACCTGGATACAAAGCTTAATGATCT	3290					
CAAGGGTCTTCTGAAAGAGATTGCTAATAAAATCAAAATAAACTGTATGAACTCTAATGGAGAAAAATC	3360					
TAATTATAGCAAGATCATATTAAGGAATGCTGATGAACATTTTGGTATCGACTACTAAAAGAGAGATTT	3430					
TCAGACCCCTGGGTACATGGTGGATGATTTTAAATCAGCTAGTGTGCTGAGACCTTGAGAAATAAGTGT	3500					
3510	3520	3530	3540	3550	3560	3570
GTGATTGGTTTCACTACTTGAAGACGGATATAAAGGAA3AATATTTCTTTTATGTGTTTCTCCAGAAATGGT	3570					
GCCTGTTTCTCTCTGTGTCTCAATGGCTGGGACTGGA3GTTGATAGTTTAAAGTGTGTTCTTACGGCTCC	3640					
TTTTTCTTTAATCTTATTTTGAATGAACACAATAATAGGAGACATCTATCCTATGAATAAGAACCTGG	3710					
TCATGCTTTACTCCTGTATTGTATTTTGTTCATTTCCAAATGATTCTCTACTTTTCCCTTTTGTATT	3780					
ATGTGACTAATTAGTTGGCATATTGTAAAA3TCTCTCAAAATAGGCCAGATTCTAAAACATGCTGCAGC	3850					
3860	3870	3880	3890	3900	3910	3920
AAGAGGACCCCGCTCTCTTTCAGGAAAAAGTGTTCATTTCTCAGGATGCTTCTTACCTGTGAGAGGAGGT	3920					
GACAAGGCAGTCTCTTGTCTCTTGGACTCAGCAGGCTCCTATTGAAGGAACACCCCAATTCCTAAATA	3990					
TGTGAAAAGTGCACCAAAAATGCAACCTTGAAAGGCACCTACTGACTTTGTTCTTATTGGAATCTCCTCTTA	4060					
TTTATTATTTTCCATTAAAAAATAAGCTGGGTATTAAGAAAAATTTAGACCATAACAGAGATGTAGAAA	4130					
GAACATAAATTTGCCCAATTACCTTAAGTAAATCACTGCTAACAATTTCTGGATGGTTTTTCAAGTCTAT	4200					
4210	4220	4230	4240	4250	4260	4270
TTTTTTCTATGATGTCTCAATTTCTCTTCAAAAATTTACAGAATGTTATCATACTACATATATACTTT	4270					
TTATGTAAGCTTTTTCACCTAGTATTTTATCAAAATATGTTTATTATATTCATAGCCTTCTTAACATT	4340					
ATATCAATAATTGCAATAAGGCCAACCTCTAGCGATTACATATATTTTGTCTCATGGAAGGCTATCTCCAG	4410					
TTGATCATTTGGGATGAGCATCTTTGTGCGATGAATCCTATTGCTGTATTTGGGAAAAATTTTCCAGGTTAC	4480					
ATTCCATAAATACTATTTATTTATTAATAATTAATAATATCGATTTATTAATAAAACCAATTTATAAGGCT	4550					

Fig. 12A(2)

4560	4570	4580	4590	4600	4610	4620
TTTTCATAAATGTATAGCAAAATAGGAATTATTAACCTTGAGCATAAGATATGAGATACATGAACCTGAACT 4620						
ATTAATAATAAATATTATATTTAACCCTAGTTTAAGAAGAAGTCAATATGCTTATTTAAATATTATGGAT 4690						
GGTGGGCAGATCACTTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACATGGCAAAACCACATCTCTACT 4760						
AAAAATAAAAAAATAGCTGGGTGTGGTGGTGCCTCCTGTAATCCCAGCTACTCAGAAGGCTGAGGTAC 4830						
AAGAATTGCTGGAACCTGGGAGGCGGAGGTTGCAGTGAACCAAGATTGCACCACTGCACTCCAGCCGGGG 4900						
4910	4920	4930	4940	4950	4960	4970
TGACAGAGTGAGACTCCGACTGAAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAATTATGG 4970						
ATGGTGAAGGGAATGGTATAGAATTGGAGAGATTATCTTACTGAACACCTGTAGTCCCAGCTTTCTCTGG 5040						
AAGTGGTGGTATTTGAGCAGGATGTGCACAAGGCAATTGAAATGCCATAATTAGTTTCTCAGCTTTGAA 5110						
TACACTATAAACTCAGTGGCTGAAGGAGGAAAATTTAGAAGGAAGCTACTAAAAGATCTAATTTGAAAAA 5180						
CTACAAAAGCATTAACTAAAAAAGTTTATTTTCCTTTTGTCTGGGCAGTAGTGAAAATAAATACTACTCACA 5250						
5260	5270	5280	5290	5300	5310	5320
CATTCACTATGTTTGCAAGGAATTAACACAAATAAAAGATGCCCTTTTACTTAAACGCCAAGACAGAAAA 5320						
CTTGCCCAATACTGAGAAGCAACTTGCATTAGAGAGGGAAGTGTAAATGTTTTCAACCCAGTTTCATCTG 5390						
GTGGAATGTTTTTGCAGGTACTCTGAGAATTTTGCCTATGAAAAATCATTATTTTGTAGTGTAGTTTCAAA 5460						
TAATGTATTGAACATACTTCTAATCAAAGGTGCTATGTCCTGTGTATGGTACTAAATGTGTCTCTGTGTA 5530						
CTTTTGCACAACCTGAGAAATCCTGCGGCTTGGTTTAAATGAGTGTGTTTCATGAAATAAATAATGGAGGAAT 5600						
5610	5620	5630	5640	5650	5660	5670
GTCAAA 5668						

Fig. 12A(3)

10 20 30 40 50 60 70

MRNRRNDTLOSTRTRYSSASRSTDSYSESDLVNFIQANFKKRECVFSTKDSKAPENVCKCGYAQSQHME 70
 GTQINQSEKWNYYKKHTKEFPTDAFGDIQFETLGKKGKYIRLSCOTDAEILYELLTQHWHLKTPNLVISVT 140
 GGAKNFALKPRMRKIFSRLLIYIAQSKGAWILTGGTHYGLTKYIGEVRONTISRSEENIVAIGIAAWGM 210
 VSNROTLIRNCOAEGYFLAQYLMDOFTROPLYLONNHTHLLVDNGCHGHPTVEAKLRNQLKXHSERT 280
 IQDSNYGGKIPIVCFAQGGGKETLKAINTSINKKPCVVVEGSGRIADVIAASLVEVEDAPTSSAVKEKLV 350

360 370 380 390 400 410 420

RFLPRTVSRLLSEEETESWIKWLKEILECSHLLTVIKMEZAGDEIVSNAISYALYKAFSTSEQOKDNWNGQ 420
 LKLLLEWNCLDLANDEIFTNDRRWESAOLQEVMTALIKDRPKFVRLFLNGLNLRKFLTHOVLTELFN 490
 HFSTLVYRNLIKAKNSYNOCALLTFVWKLVANFRRGFRKEDRNGRDEMDELHGVSPITRHPLQALFIWA 560
 LONKKELSKVIWEGTRGCTLAALGASKLLKTLAKVKNDINAAGESEELANEYETRAVELFTECYSSOEDL 630
 AEQLLVYSCEAWGGSNCLELAVEATDQHFTAQPGVONFLSKQWYGEISROTKNWKILCLFIIPLVGCGF 700

710 720 730 740 750 760 770

VSFRKKPVCKHKKLLWYYYVAFFTSPFVVFVSWNVVFIQAFLLFAYVLLMDGFHSVPHPELVLYSLVFVLF 770
 CDEVROWYVNGVNYFTDLWNVMDTLGLFYFIAGIVFRLLHSSNKSSLYSGRYFCLDYIFTLRLTHFTV 840
 SRNLGPKIIMLQMLIDVFFFLFLFAYVMVAFGVARGGILRQNECRWRWIFRSVIYEPYLAFFGQVPSOV 910
 DGTYYDFAHCTFTGNESKFLCVELDEHNLPRFPENITIPLYCIYMLSTNILLVYNLLVAMFGYTVGTVCEN 980
 NDCVWKFGRYFLVQEYCSRLNIPFPFIVFAYFVMVKKCFKCCCKEKNMESSVCCFKNEDNETLAWEGVM 1050

1060 1070 1080 1090 1100 1110 1120

IKENYLVKINTKANDTSEEMRHRFRQLDTKLNCLKGLLKEIANKIK. 1096

002793-064300

Fig. 12B